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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,393	03/22/2005	Christoph Studer	2004_1525A	5713

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EXAMINER

LEE, JINHEE J

ART UNIT PAPER NUMBER

2831

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/509,393	Applicant(s) STUDER, CHRISTOPH	
	Examiner Jinhee J. Lee	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the lead formed of several intertwined wires of claims 22 and 29 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Claim Objections

3. Claim 22 is objected to because of the following informalities:

Claim 22 line 5, the phrase "lead);," has a grammatical error. Examiner suggests, "lead;" instead to correct the grammatical error.

Claim 22 line 6, the phrase "protective insulation" has an error. Examiner suggests "a protective insulation" instead to avoid confusion.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 22-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation of "a current lead formed of **several intertwined wires**" of claims 22 and 29 are new matter. The applicant has stated that the specification page 4 line 6 disclosed this matter, however, examiner disagrees. The sentence that includes line 6 describes figure 1 and figure 2, which clearly shows a conductor as the lead, not "formed of several intertwined wires" as claimed. Furthermore, the specification describes the whole cable, in reference to "with several intertwined wires" in line 6, not of the conductor.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 22 and 26 recites the limitation "a conductor having a current lead formed of several intertwined wires" in line 3 and 4 respectively. This is confusing. Is it supposed to be "a conductor" or "**several intertwined wires**"? Clarify. Examiner will

interpret as "a conductor having a current lead formed of wire" for the purposes of examination to conform with the disclosure including the drawings.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ijff et al. (US4358636).

Re claim 22 (as best understood), Ijff et al. discloses a cable comprising three intertwined electrical cables, each of said intertwined electrical cables comprising: a conductor (2 for example) having a current lead formed of a wire; a neutral or return line (5, outer conductor for example) formed by a number of component conductors that are distributed concentrically about the current lead, a protective insulation disposed between the current lead (2) and the component conductors (5) of the neutral or return line, and a protective sheath (14 for example) surrounding the neutral or return line. (See figure). Ijff et al. does not explicitly disclose that the protective insulation is approximately 0.2 to 1.4 mm thick. It would have been an obvious matter of design choice to use that the protective insulation that is approximately 0.2 to 1.4 mm thick in order to provide an optimum size, since such a modification would have involved a mere change in the dimensions or proportion of a component. A change in dimensions or

proportion is generally recognized as being within the level of ordinary skill in the art. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984).

Re claims 23 and 26, note that Ijff et al. discloses a cable, comprising a plurality of dummy conductors and a plurality of control conductors embedded in the neutral or return line, which is formed by the component conductors. Regarding the limitation of "for control, monitoring, measurement and command purposes", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Re claim 16, note that the device of Ijff et al. discloses a three-conductor cable, characterized in that the three electrical cables (unnumbered) are held together by a sheath (32 for example) which encases them (see figures 3 and 5).

Re claim 25, Ijff et al. discloses the claimed invention except that a fleece tape is disposed over the neutral or return line, and a protective sheath disposed over the fleece tape. Examiner takes official notice that fleece tape is a known material for use in the electrical applications. Furthermore, applicants have presented no explanation that use of this particular material or configuration of this material is significant or is anything more than one of numerous embodiments. Ijff et al. discloses that a polyester foil (15) is disposed over the neutral or return line and a protective sheath (16) is disposed over the polyester foil. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the fleece tape instead of polyester foil in order to enclose the conductors, since it has been held to be within the general

skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Re claim 27, Ijff et al. discloses the claimed invention except that the number of component conductors is eight. Applicants have presented no explanation that use of this number of components or configuration is significant or is anything more than one of numerous embodiments. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use eight component conductors for optimum shape, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Re claim 28, note that the device of Ijff et al. discloses three intertwined electrical cables encased by an outer sheath (14 for example).

Re claim 29 (as best understood), Ijff et al. discloses a cable comprising a three-conductor cable having three intertwined electrical cables, each of said intertwined electrical cables comprising: a conductor (2 for example) having a current lead formed of a wire; a neutral or return line (5, outer conductor for example) formed by a number of component conductors that are distributed concentrically about the current lead, a protective insulation layer disposed between the current lead (2) and the distributed component conductors (5) of the neutral or return line, and a protective sheath (14 for example) applied on the neutral or return line. (See figure). Ijff et al. does not explicitly disclose that the protective insulation layer surrounding the inner conductor is approximately 0.2 to 1.4 mm thick. It would have been an obvious matter of design

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choice to use that the protective insulation layer surrounding the inner conductor that is approximately 0.2 to 1.4 mm thick in order to provide an optimum size, since such a modification would have involved a mere change in the dimensions or proportion of a component. A change in dimensions or proportion is generally recognized as being within the level of ordinary skill in the art. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984).

Response to Arguments

8. Applicant's arguments with respect to claims 22-29 have been considered but are moot in view of the new ground(s) of rejection.

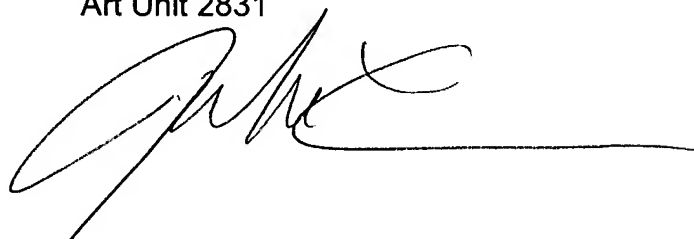
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J. Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M, T, Th and F at 6:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jinhee J Lee
Patent Examiner
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A handwritten signature in black ink, appearing to read 'Jinhee J Lee', followed by a long horizontal line extending to the right.

jjl